

were significantly lower compared to human insulin only patients (\$20,709, $p < 0.001$) and those receiving both analog and human insulins (\$28,679, $p < 0.001$). Inpatient visits, length of stay, emergency visits, and clinic visits were also significantly lower ($p < 0.001$) for analog-only patients. Hypoglycemia-related costs and utilization and overall diabetes-related utilization followed the same patterns. **CONCLUSION:** Patients receiving only analog insulin had higher insulin costs but lower post-index total health care costs and utilization, whether all-cause or diabetes-related, compared to patients receiving human insulin or a combination of analog and human insulins.

PDB70**IMPACT OF ANEMIA ON HOSPITALIZATION COSTS IN PATIENTS WITH DIABETES AND CHRONIC KIDNEY DISEASE**

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OBJECTIVE: Anemia is a well known complication associated with CKD. However, there are little data regarding its association with hospitalizations. The purpose of this study was to investigate whether anemia is associated with increased hospitalization costs in patients with diabetes and chronic kidney disease (CKD). **METHODS:** An analysis of medical claims and laboratory data between January 2000 and February 2006 from over 45 health plans contributing to the Ingenix Impact National Managed Care Database was conducted. Inclusion criteria were ≥ 2 hemoglobin (Hb) values, ≥ 2 claims (within a 90-day period) for diabetes mellitus preceding ≥ 1 claim for CKD and ≥ 2 glomerular filtration rate values of < 60 mL/min/1.73 m², and not yet on dialysis. Patients were excluded if they had cancer or lupus, received organ transplantation or chemotherapy, or were treated for anemia with an erythropoiesis-stimulating agent or blood transfusions. An open-cohort design was used to classify patients into observation periods of anemia (Hb < 11 g/dL), within the K/DOQI treatment recommendations, and non-anemia, which allowed for changes in anemia status over time. Both univariate and multivariate analyses were conducted to compare periods of anemia and non-anemia for average yearly hospitalization costs. **RESULTS:** A total of 708 patients with diabetes and CKD formed the study population. Mean age was 65 years; 44% women. Anemia was associated with a significant increase in hospitalization costs, with an unadjusted incremental yearly cost of \$17,072 (anemia: \$25,342; non-anemia: \$8270; $p < .001$) relative to non-anemia. The majority of hospitalizations (57%) were related to cardiovascular disease, with anemia increasing the cost of cardiovascular-hospitalizations by \$8647 (anemia: \$13,723; non-anemia: \$5076; $p < .001$). After controlling for covariates, anemia remained significantly associated with a hospitalization cost increase. **CONCLUSION:** The current study based on real-life practice data demonstrated that anemia in patients with diabetes and CKD was associated with a significant increase in hospitalization costs.

PDB71**EVALUATION OF ECONOMIC OUTCOMES, ADHERENCE, AND GLYCEMIC CONTROL FOR DIABETIC PATIENTS IN A PHARMACIST-RUN MEDICATION MANAGEMENT PROGRAM**

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OBJECTIVE: To measure the effects of a pharmacist-run medication management program on medication adherence, glycemic control, and total health care expenditures. **METHODS:** Scott & White Health Plan (SWHP) claims data were evaluated to identify high-risk diabetics aged 18–63 years, defined as those who demonstrate poor glycemic control (HbA1c $> 7.5\%$) and utilized $> \$600$ of prescription medications the year prior to study enrollment. A control group was identified who met the same inclusion criteria, but who were not invited to the program due to geographic constraints. Medical utilization costs were analyzed beginning one year prior to study enrollment and included inpatient, outpatient, emergency department, and prescription costs. Health system charges, standardized to 2006 dollars, were used as a surrogate for costs. Intervention costs were estimated from pharmacists' wage rates. Medication adherence was calculated as medication possession ratio (MPR) of oral antidiabetic agents. HbA1c results were analyzed to determine glycemic control. **RESULTS:** Analysis of 46 subjects and their matched controls one year after program implementation showed positive trends, although none of the results were statistically significant. The mean MPR for the intervention group increased from 0.69 to 0.79, while there was no change from a baseline of 0.64 for controls [$p = 0.24$]. Intervention patients demonstrated a greater improvement (9.5% to 8.2%) in HbA1c than controls (9.5% to 8.7%) [$p = 0.15$]. Although total monthly health care costs increased in both the intervention (\$1448 to \$1756; difference = \$308 \pm \$2016) and control groups (\$1089 to \$1745; difference = \$656 \pm \$2641) [$p = 0.46$], the increase was lower in the intervention group. **CONCLUSION:** Patients in the intervention group trended toward better medication adherence and a greater decline in HbA1c than controls. We expect the trend of cost savings will continue and strengthen in the future due to long-term benefits associated with sustained glycemic control.

PDB72**THE NEED FOR EARLIER INSULIN INITIATION AND INTENSIFICATION AMONG PATIENTS WITH TYPE 2 DIABETES: EVIDENCE FROM HEALTH CLAIMS AND LABORATORY DATABASE**

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OBJECTIVE: Patient and provider "psychological insulin resistance" can contribute to a delay in initiation of insulin therapy in patients with type 2 diabetes (T2DM). Consequently, by the time patients initiate insulin, complications may have already developed. If patients initiate insulin but therapy is not intensified to reach glycemic goal (HbA1c 7%), the ability to prevent or delay complications may be compromised. The objective of this study was to determine differences in the incidence of complications of diabetes between patients with HbA1c $< 7\%$ and those with HbA1c $\geq 7\%$. **METHODS:** US health claims and clinical laboratory data from 2003–2005 were used to identify and stratify patients by mean HbA1c (controlled 7% vs. sub-optimally controlled 7%) for analysis. Cohort was limited to